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COFFEE AND THE METHOD OF PREPARING THE SAME

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The present invention relates to the treatment of coffee and more particularly to a process for preparing the coffee for more convenient table use. Coffee is customarily prepared for drinking as a beverage by a number of different methods, such as percolation, drip method and boiling a ground coffee in water for a very few minutes. As a rule when coffee is used in any of these manners, approximately about a table-spoonful 10 or more is necessary for each individual cup. It is practically imposible to make a cup of coffee for table use by putting some coffee in a cup and pouring boiling water over it as it is quite often done for instance in preparing a cup of tea. It 15 is practically impossible to prepare coffee in the same way that tea is prepared for a number of reasons. In the first place the coffee occupies too great a space in comparison to the water in the cup; secondly, ordinarily the water will cool 20 before the coffee becomes sufficiently strong. In the third place the coffee grounds usually absorb so much water that a good part of the water is used up and very little liquid remains. This is quite different from the brewing of a cup of tea 25 where a small tea bag may be used and the water in the cup becomes quite strong in a very short time without very much absorption of water by the tea leaves. Attempts have been made to overcome these difficulties, particularly as illus-30 trated by the use of coffee crystals where the coffee is dehydrated and made into such a form that most of the water and cellulose woody structure is withdrawn and only the soluble coffee crystals remain. Unfortunately the dehydration of cof-35 fee carries with it certain volatile constituents which are essential in the production of the fine bouquet or flavor that is usually associated with coffee prepared in the usual way and while therefore the coffee extract or crystals may be used in 40 preparing individual cups of coffee simply by pouring the hot water over them, nevertheless something very essential is lost by this process in coffee flavor.

Other methods besides the one just mentioned 45 above have been tried, as for instance the mixing of dehydrated coffee with ground coffee in an effort to replace principally the aroma and flavor lost by the dehydration process. Unfortunately such a preparation must be specially handled, 50 principally because the ground coffee is subjected to oxidation effects and to the usual deterioration and staling of ordinary ground coffee. This method requires expensive methods of packing either by hermetically sealing in an inert gas like 55 carbon dioxide or by vacuum packing. Moreover the soluble dehydrated coffee crystals which are mixed with the ground coffee are of a hygroscopic nature and through the exposure of the coffee crystals to the atmosphere, allow an absorption 60 of moisture which mats solidly and closes up the

interstices between the particles of ground coffee retarding the circulation of water when making coffee. This effect makes it difficult to prepare coffee in individual bags as tea is prepared in balls or bags for individual cup use so that at the present time for the most part coffee is still sold in sealed containers in bulk or in crystal form.

In the present invention I have devised a method of preparing coffee so that the coffee is con- [10 centrated in sufficiently small volume that approximately a tea-spoonful of the preparation in a bag similar to a tea bag may be used in the preparation of a single cup of coffee, hot or cold, simply by the addition of hot or cold water. Cof- 16 fee prepared in this way, according to my invention not only retains its original aroma and bouquet, but also provides a cup of coffee of full strength without deterioration in ordinary packages and with very much less coffee used. The 20 coffee according to the present invention may be described briefly as coffee sealed coffee in which a concentrated coffee extract is sealed into the coffee grounds in such a way that the porous cells of the grounds themselves are completely sealed 25 with the coffee extract and most of the coffee extract on the other hand is also completely sealed from the air to which it might be exposed.

The invention relating to the process of the present invention will be more fully learned and understood from the description given of the process.

Coffee of the desired nature is prepared by grinding to the desired granular size, which is preferably just larger than the mesh of the cof- 35 fee bag in which the coffee is ultimately placed for individual cup use. A concentrated extract is made of the same kind or different kind of coffee as that ground. The ground coffee is then treated by a vacuum process to draw out some of the 40 occluded air and gases and simultaneously therewith is filled with the coffee extract or concentrate to give space occupied by these gases a greater soluble coffee content than the coffee normally had. This liquid extract is preferably 45 of a high degree concentration, for example such having a specific gravity of approximately 28° to 29° Baumé. After the coffee grounds are thoroughly impregnated with the coffee extract so that all the interstices and cells of the grounds 50 are filled, the grounds are then dried. This extract may be a blend of coffee different from the fresh grounds or the same, depending upon the nature and flavor of the coffee to be made.

The extract may be decaffeinized in part or 55 in whole or the grounds may be decaffeinized and in fact any soluble type of extract may be used. In place of a pure coffee extract a prepared coffee may be used as for instance a coffee chicory compound or other coffee compound mix- 60